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WHAT IS CLAIMED IS:

1. A method of depositing a plurality of layers on an article comprising the steps of:

flowing a plasma gas in at least one plasma generation chamber, the at least one plasma generation chamber being in communication with a deposition chamber, the deposition chamber having a lower pressure than the at least one plasma generation chamber, the article being disposed in the deposition chamber;

generating at least one arc in the at least one plasma generation chamber to create at least one plasma which flows into the deposition chamber; A

injecting a first material into the at least one plasma to form a first layer on the article; and

injecting a second material into the at least one plasma to form a second layer on the first layer, the second material comprising a gaseous reagent.

2. The method of claim 1, wherein the first material comprises an organosilicon material, the second material comprises an organosilicon material, and the method further comprises the step of injecting an oxidant with the second material.

3. The method of claim 1, wherein the first material comprises an organosilicon material, the second material comprises an organometallic material, and the method further comprises the step of injecting an oxidant with the second material.

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4. The method of claim 1, wherein the first material comprises an organometallic material, the second material comprises an organosilicon material, and the method further comprises the steps of:

injecting an oxidant with the first material; and
injecting an oxidant with the second material.

5. The method of claim 1, wherein the first material or the second material comprises an evaporated elemental metal.

6. The method of claim 1, further comprising the step of injecting a third material into the plasma to form a third layer on the second layer.

7. The method of claim 6, wherein the first material comprises an organosilicon material, the second material comprises an evaporated elemental metal, and the third material comprises an organosilicon material, and the method further comprises the steps of

injecting an oxidant with the second material; and
injecting an oxidant with the third material.

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8. The method of claim 7, wherein the first material comprises at least one of octamethylcyclotetrasiloxane, tetramethyldisiloxane, and hexamethyldisiloxane, the second material comprises zinc, and the third material comprises at least one of octamethylcyclotetrasiloxane, tetramethyldisiloxane, and hexamethyldisiloxane.

9. The method of claim 6, wherein the first material comprises an organosilicon.

10. The method of claim 6, wherein the first material comprises octamethylcyclotetrasiloxane.

11. The method of claim 6, wherein the first material comprises tetramethyldisiloxane.

12. The method of claim 6, wherein the first material comprises a hydrocarbon.

13. The method of claim 6, wherein the first layer comprises a polymerized organosilicon material.

14. The method of claim 6, wherein the first layer comprises polymerized octamethylcyclotetrasiloxane.

15. The method of claim 6, wherein the first layer comprises polymerized tetramethyldisiloxane.

16. The method of claim 6, wherein the second material comprises an organometallic material.

17. The method of claim 6, wherein the second material comprises an evaporated elemental metal.

18. The method of claim 17, wherein the second material comprises at least one of zinc and indium.

19. The method of claim 17, wherein the second material comprises zinc, and the method further comprises the step of injecting sulfur with the zinc.

20. The method of claim 6, further comprising the step of injecting an oxidant with the second material.

21. The method of claim 6, wherein the second material comprises dimethyl zinc.

22. The method of claim 6, further comprising the step of injecting oxygen with the dimethyl zinc.

23. The method of claim 6, wherein the second material comprises diethyl zinc.

24. The method of claim 6, wherein the second material comprises titanium isopropoxide.

25. The method of claim 6, wherein the second material comprises cerium IV tetrabutoxide.

26. The method of claim 6, wherein the second layer comprises zinc oxide.

27. The method of claim 6, wherein the second layer comprises titanium dioxide.

28. The method of claim 6, wherein the second layer comprises cerium dioxide.

29. The method of claim 6, wherein the second layer comprises zinc sulfide.

30. The method of claim 6, wherein the second layer comprises an inorganic material.

31. The method of claim 6, wherein the third material comprises an organosilicon material.

32. The method of claim 6, further comprising the step of injecting an oxidant with the third material.

33. The method of claim 6, wherein the third material comprises octamethylcyclotetrasiloxane.

34. The method of claim 6, wherein the third material comprises tetramethyldisiloxane.

35. The method of claim 6, wherein the third material comprises hexamethyldisiloxane.

36. The method of claim 6, further comprising the step of injecting oxygen into the plasma with the second material, wherein a flow rate of the oxygen is sufficiently large to form the second layer in a crystalline form.

37. The method of claim 6, further comprising the step of injecting oxygen into the plasma with the second material, wherein a flow rate of the oxygen is greater than or equal to a stoichiometric flow rate of oxygen necessary to completely react the second material.

38. The method of claim 6, wherein first, second, and third layers are deposited in a total deposition time of less than 45 seconds.

39. The method of claim 6, wherein the first, second, and third layers are deposited in a total deposition time of less than 30 seconds.

40. The method of claim 6, wherein the first, second, and third layers are deposited in a total deposition time of less than 20 seconds.

41. The method of claim 38, wherein the first, second, and third layers are deposited without intermittent cooling between deposits of individual layers.

42. The method of claim 38, wherein two of the three layers are deposited successively without a cooling period therebetween.

43. The method of claim 38, wherein the second layer has an ultraviolet absorbance of at least 1.0.

44. The method of claim 38, wherein the second layer has an ultraviolet absorbance of at least 2.0.

45. The method of claim 38, wherein the third layer has a delta haze value of less than or equal to 4.0 percent under the Taber Abrasion Test , ASTM Test Method D1044, with a load of 1000 grams evenly distributed on two wear wheels of type CS-10F for 1000 cycles.

46. The method of claim 38, wherein the third layer has a delta haze value of less than or equal to 2.0 percent under the Taber Abrasion Test , ASTM Test Method D1044, with a load of 1000 grams evenly distributed on two wear wheels of type CS-10F for 1000 cycles.

47. The method of claim 6, wherein the second material is injected before termination of a flow of the first material to produce a graded transition between the first layer and the second layer.

48. The method of claim 6, wherein the third material is injected before termination of a flow of the second material to produce a graded transition between the second layer and the third layer.

49. The method of claim 6, further comprising the step of controlling the flow of the plasma with a nozzle which extends from an anode used to generate the arc.

50. The method of claim 49, wherein the nozzle has a conical shape.

51. The method of claim 6, wherein an oxidant is not injected with the first material.

52. The method of claim 7, wherein the article comprises a polycarbonate.

53. The method of claim 6, wherein the second layer comprises an ultraviolet absorbing material having an a ultraviolet absorbance value of at least 1.0.

54. The method of claim 6, wherein the second layer comprises an ultraviolet absorbing material having an a ultraviolet absorbance value of at least 2.0.

55. The method of claim 53, wherein the third layer comprises an abrasion resistant material having a delta haze value of at most 4.0 percent.

56. The method of claim 54, wherein the third layer comprises an abrasion resistant material having a delta haze value of at most 2.0 percent.

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57. The method of claim 1, wherein the substrate comprises glass.

58. The method of claim 6, wherein the second material comprises at least one of elemental zinc, elemental indium, and elemental aluminum.

59. The method of claim 6, wherein the second layer comprises zinc oxide doped with indium.

60. The method of claim 6, wherein the second layer comprises doped zinc oxide.

61. The method of claim 6, wherein the second layer comprises zinc oxide doped with at least one of aluminum, fluorine, boron, gallium, thallium, copper, and iron.

62. An article of manufacture comprising:

a substrate;

an interlayer disposed on the substrate, the interlayer comprising a polymerized hydrocarbon material;

a second layer disposed on the interlayer, the second layer comprising an inorganic ultraviolet absorbing material; and

a third layer disposed on the second layer, the third layer comprising an abrasion resistant material.

63. The article of claim 62, wherein the abrasion resistant material comprises an oxidized organosilicon material.

64. An article of manufacture comprising:

a substrate;

an interlayer disposed on the substrate, the interlayer comprising a polymerized organic material;

a second layer disposed on the interlayer, the second layer comprising zinc sulfide;

a third layer comprising an abrasion resistant material.

65. The article of claim 64, wherein the abrasion resistant material comprises an oxidized organosilicon material.

66. An article of manufacture comprising:

a substrate;

an interlayer disposed on the substrate, the interlayer comprising a polymerized organic material;

a second layer disposed on the interlayer, the second layer comprising an inorganic ultraviolet absorbing layer; and

a third layer comprising an oxidized organosilicon.

67. The article of claim 66, wherein the interlayer comprises a polymerized organosilicon.

68. The article of claim 66, wherein the interlayer comprises a polymerized hydrocarbon.

69. A multilayer article comprising:

a substrate;

a ZnO layer; and

an abrasion resistant layer, wherein an increase in haze of the ZnO layer, after being is submerged in 65° C water for 7 days, is less than 1.7%, and wherein an average daily increase in optical density of the ZnO layer, after being submerged in 65° C water for 21 days, is less than or equal to 0.016.

70. The multilayer article of claim 69, further comprising an interlayer of polymerized organosilicon between the substrate and the ZnO layer.

71. The multilayer article of claim 70, wherein the ZnO layer is deposited by evaporating elemental zinc and directing the evaporated elemental zinc into a plasma.

72. The multilayer article of claim 71, wherein the ZnO layer has a thickness of 200 nm to 1 micron.

73. The multilayer article of claim 72, wherein the abrasion-resistant layer has a thickness of 2-6 microns.